

REMARKS

The Invention

The present invention generally relates to rakes and, more particularly, to lawn rakes having resiliently flexible tines.

Status of the Claims

Claims 1-8, 10-12, 15, 16, 23, 24 and 29 are pending in the application.

Claims 1-8, 10, 11, 12, 15, 16, 23, 24 and 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Stapley et al.* (U.S. Patent No. 5,173,193) in view of *Bennett* (U.S. Patent No. 3,518,758).

Applicants note that in the Office Action preceding the present Office Action, Claim 9 was allowed, but objected to as being dependent a rejected base claim. The recitations of Claim 9 were amended into Claim 1.

Claims 1-8, 10, 11, 12, 15, 16, 23, 24 and 29

Rejected under 35 U.S.C. § 103(a)

Claims 1-8, 10, 11, 12, 15, 16, 23, 24 and 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Stapley et al.* (U.S. Patent No. 5,173,193) in view of *Bennett* (U.S. Patent No. 3,518,758). *Stapley* discloses a rake having a first handle, a head with a first set of tines, and a cleaning bar that supports a second set of tines. The cleaning bar is coupled to a second tubular outer handle having a grip. The second handle is slidably disposed about the first handle and moves between a first and second position. The cleaning bar includes a plurality of trapezoidal slots (see figure 8) through which the first set of tines extend. The second handle includes a plurality of openings spaced longitudinally under the path of travel of the second handle. A resilient button in the first handle is biased to extend through the openings to lock the second handle in place.

In this configuration, a user may clean the first set of tines by sliding the second handle to a lower position which, in turn, causes the cleaning bar to move over the first set of tines. The plurality of trapezoidal slots on the cleaning bar are actually related to the resilient button and the means for preventing the button from locking the second

handle in place during the cleaning operation. That is, to prevent the resilient button from engaging each opening, the second handle is rotated slightly so that the openings on the second handle do not align with the resilient button; however, when the second handle rotates, the cleaning bar must rotate as well. To accommodate the rotation of the cleaning bar relative to the first set of tines, the cleaning bar must have slots that are considerably thicker than the tines of the first set. Thus, the cleaning bar slots have the trapezoidal shape structured to accommodate the rotational movement of the cleaning bar relative to the first set of tines. See generally, Col. 5, lines 33-60.

Given that the *Stapley* cleaning bar has slots that are considerably thicker than the tines of the first set, it is clear that the cleaning bar does not provide any enhanced rigidity to the tines of the first set. That is, the tines are free to flex within the slots and relative to the first handle. Further, as the second set of tines are supported by the cleaning bar and do not extend therethrough, the cleaning bar also fails to impart additional rigidity to the second set of tines.

Bennett does not disclose a garden tool, but rather a utility knife. The utility knife includes a blade structured to slide in and out of a handle. Further, when the blade is in the extended position, the blade may be rotated so that the sharp edge extends generally perpendicular to the longitudinal axis of the handle. The blade is secured to the handle by a knob which travels through a longitudinal slot.

Applicants disagree with the Examiner's conclusion that the invention recited in Claims 1-8, 10, 11, 12, 15, 16, 23, 24 and 29 are unpatentable over *Stapley* in view of *Bennett*. Initially, Applicants note that the Examiner has failed to indicate where *Stapley* discloses "a brace movable along the tines between first and second positions **to change effective stiffness of the flexible tines**" as recited in Claim 1 (emphasis added). That is, the Examiner has merely stated that *Stapley* discloses "a brace movable along the tines between first and second positions" but does not address the nature of the brace. Applicants note that, due to the trapezoidal shape of the openings in the *Stapley* cleaning bar, the *Stapley* cleaning bar does not "change effective stiffness of the flexible tines." Moreover, the shape of the openings in the *Stapley* cleaning bar are not a mere design choice which can be changed. As set forth above, the openings must have the disclosed shape to allow the second handle to rotate. As such, it would not be obvious to change

the *Stapley* cleaning bar to be a brace structured to “change effective stiffness of the flexible tines.”

Further, *Bennett* is non-analogous art. That is, as set forth in *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992), “[i]n order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” In *Oetiker* the applicant claimed an improvement in a hose clamp which differed from the prior art in the presence of a preassembly “hook” which maintained the preassembly condition of the clamp and disengaged automatically when the clamp was tightened. The claims were rejected on the basis of a reference which disclosed a hook and eye fastener for use in garments. The rejection was based on the rationale that all hooking problems are analogous. The rejection, however, was overturned when the court held the reference was not within the field of applicant's endeavor, and was not reasonably pertinent to the particular problem with which the inventor was concerned because it had not been shown that a person of ordinary skill, seeking to solve a problem of fastening a hose clamp, would reasonably be expected or motivated to look to fasteners for garments.

Similarly, this application relates to a rake whereas *Bennett* relates to a utility knife. Rakes are, generally, two-handed tools structured to engage dirt, leaves, and other debris. Utility knives are structured to be used to cut and scrape various materials, but are not generally used on dirt, leaves, and other debris. Thus, just as the prior art garment hook was unrelated to the *Oetiker* hose clamp hook, the knife of *Bennett* is unrelated to the rake of *Stapley*. Further, the Examiner has failed to indicate why a person of ordinary skill, seeking to solve a problem related to a rake, would reasonably be expected or motivated to look to a reference disclosing a utility knife.

Further, with regard to the determination of obviousness under 35 U.S.C. § 103, the Supreme Court has recently stated that:

Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, *it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.* This is so because inventions in most, if not all, instances

rely on building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.

KSR International Co. v. Teleflex Inc., ___ U.S. ___, ___, 2007 WL 1237837 (2007), (Slip Opinion at 14-15) (emphasis added). In addition, the Supreme Court also noted that:

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, *this analysis should be made explicit*. See *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, *there must be some articulated reasoning with some rational underpinnings to support the legal conclusion of obviousness*”).

Id., at ___ (Slip Opinion at 14) (emphasis added). It is noted that the Supreme Court included an extended discussion reciting the nature of the inventions disclosed in the prior art and then several paragraphs identifying the rationale and reasons that the cited art could be combined and why one skilled in the art would make such a combination. *Id.*, at ___ (Slip Opinion at 3-6, 20-22).

With regard to combining known elements of an invention, the Supreme Court further stated that, “[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” This holding comports with *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) which held that, although some of the cited references, individually, may have some of the claimed inventions’ features, “one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to depreciate the claimed invention.” *Id.* at 1075. Instead, to reach the proper conclusion under §103:

the decision maker must step backward in time and into the shoes worn by [a person having ordinary skill in the art] when the invention was unknown and just before it was made. In light of *all* the evidence, the decision maker must then determine whether...the claimed invention as a whole would have been obvious at *that* time to *that* person.

Id. at 1073-74.

The Examiner has not properly supported the rejection under 35 U.S.C. § 103(a) and under *KSR International*. In the Office Action, the Examiner merely identified selected elements from the cited art, *e.g.* a rake having a slidable cleaning bar (*Stapley*) and another reference that discloses knob coupled to a sliding blade (*Bennett*). The Examiner then stated that, “[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to replace *Stapley et al.*’s adjustment mechanism with that of *Bennett*’s alternative adjustment mechanism in order to provide an adjustment function without having to disassemble the apparatus.” This sentence is the only statement regarding the motivation to combine the references.

Applicants believe that a single conclusory sentence is not sufficient to qualify as an “articulated reasoning with some rational underpinnings to support the legal conclusion of obviousness” and that the Examiner has failed to make the analysis explicit. Such an explicit analysis would be similar to the analysis provided by the Supreme Court in *KSR*, which noted the elements in question and detailed how one skilled in the art would assemble, and even alter, these elements to arrive at the invention recited in the patent at issue.

Moreover, the limited analysis provided by the Examiner has a number of logical flaws. First, Applicants note that the *Stapley* apparatus does not have to be disassembled to operate and, as such, the Examiner’s stated rationale for combining the references is irrelevant. Second, the cleaning function of the *Stapley* apparatus includes a “vibrational impact” motion, *i.e.* the rotation of the cleaning bar hard enough to knock debris from the tines. *See* Col. 5 at 51-56. It is noted that, as the second set of tines are located on the cleaning bar, this impact is the only cleaning force applied thereto. If, however, the *Bennett* locking device was used, the attendant slot for the locking device would be straight. In this configuration, the second handle of *Stapley* would not be structured to rotate and could not perform the “vibrational impact” motion required to clean the second set of tines on the *Stapley* rake.

Third, *KSR* notes that 35 U.S.C. § 103(a) is applicable to the “combination of two known devices according to their established functions.” As set forth in detail above, the “established function” of the *Stapley* cleaning bar is, as the name implies, to clean the

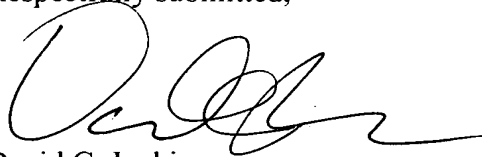
first set of tines. The *Stapley* cleaning bar is not structured to change the effective stiffness of the flexible tines. Thus, for the stated combination of references to disclose all of the elements recited in the claims, one skilled in the art would not only have to combine the cited references, but also change the “established function” of the *Stapley* cleaning bar by making the slots non-trapezoidal and much more narrow. The Examiner has also failed to provide a detailed analysis as to why one skilled in the art would destroy the function of the *Stapley* cleaning bar by converting it into a support bar.

As these references cannot be combined under 35 U.S.C. § 103(a) and as the individual references fail to disclose “a brace movable along the tines between first and second positions to change effective stiffness of the flexible tines” as recited in Claims 1 and 29, the rejection of Claims 1 and 29, as well as any claims dependent therefrom, under 35 U.S.C. § 103(a) is improper and the Examiner’s rejection should be withdrawn.

CONCLUSION

In view of the remarks above, Applicants respectfully submit that the application is in proper form for issuance of a Notice of Allowance and such action is requested at an early date.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. C. Jenkins', with a stylized, flowing script.

David C. Jenkins
Registration No. 42,691
Eckert Seamans Cherin & Mellott, LLC
600 Grant Street, 44th Floor
Pittsburgh, PA 15219
(412) 566-1253
Attorney for Applicants